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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
MOORE, KARLA A	
ART UNIT	**PAPER NUMBER**
1792	

NOTIFICATION DATE	DELIVERY MODE
01/08/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/826,920	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	KARLA MOORE	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 September 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-9,11-15,17-21,23,24 and 29-36* is/are pending in the application.

4a) Of the above claim(s) *29-32* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-9,11-15,17-21,23,24 and 33-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *0609*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

9DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 5-6, 13-15, 17-21, 23-24, 33 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0009538 A1 to Arai in view of Japanese Patent Publication No. 2000223269A to Aoshima et al. and U.S. Patent No. 6,090,207 to Knauss et al.

4. Regarding claims 1, 13 and 19: Arai discloses an apparatus for forming a film substantially as claimed in Figures 1-3, comprising: a conveyance chamber (501) connected to a load chamber (504); a film formation chamber (506) connected to the

conveyance chamber; and an installation chamber (508) connected to the film formation chamber comprising means adapted to move first, second and third evaporation sources (evaporation sources 109 a-c; interior transferring mechanism, see paragraph 52). Arai also teach that one or both of a substrate and an evaporation cell are moved during evaporation in order to deposit material over a wide region (paragraph 27). Also, with respect to the shape of the openings in the sources, as recited in claims 13 and 19, the courts have held that selections of shape are a matter of choice which a person of ordinary skill in the art will find obvious absent persuasive evidence that the particular configuration of the claimed shape was significant. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

5. However, few details are given on regarding the means adapted to move the first second and third interior transferring mechanism.

6. Aoshima et al. disclose an installation chamber (13) comprising means adapted to move (15) first, second and third evaporation sources, wherein the means to move the first, second and third evaporation sources is configured to move in an x direction, y direction and z direction in a film formation chamber (see arrows in Figures 1 and 2 and paragraph 20 of online JPO translation) for the purpose of providing an organic thin film forming device that is suitable for mass production and can continuously produce highly-reproducible organic films (abstract).

7. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided the installation chamber of Arai comprising means adapted to move the first, second and third evaporation sources,

wherein the means to move the first, second and third evaporation sources is configured to move in an x direction, y direction and z direction in a film formation chamber during evaporation in order to provide an organic thin film forming device that is suitable for mass production and can continuously produce highly-reproducible organic films as taught by Aoshima et al.

8. Regarding the provision of individual means adapted to move the evaporation sources and individual installation chambers for the means adapted to move the evaporation chambers, Examiner notes that the courts have ruled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). In the instant case, duplicating the means adapted to move the evaporation sources and the installation chamber such that individual means adapted to move were provided for each of the evaporation sources in a single chamber or in individual chambers would produce neither a new, nor an unexpected result, rather such provisions would allow for increased optimization of the overall apparatus resulting from the capability to individually handle each of the evaporation sources.

9. It is also noted that the mechanism for setting an evaporation material in each of the first, second and third evaporation sources in the installation chamber can be interpreted as a conveyance program of a control program as provided in Aoshima et al. (see paragraph 20 of translation).

10. Regarding the recitation, “wherein an evaporation is performed while at least one of the means adapted to move the first, second and third evaporation sources moves in

the film formation chamber, it is noted that this can be seen as an intended use of the apparatus that could be practiced by the prior art. For example, if any of the evaporation sources is heated high enough (intentionally or unintentionally) while being moved from the installation chamber to the film formation chamber in Aoshima et al., an evaporation could be performed.

11. Nevertheless, movement of deposition sources is known, as demonstrated by Knauss et al.

12. Knauss et al. discloses movement of a substrate and/or deposition sources during a deposition for the purpose of forming a film as desired (see, e.g., column 7, rows 41-63).

13. It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to provide movement of a substrate and/or deposition sources in Arai et al. and Aoshima et al. during a deposition in order to form a film as desired as taught by Knauss et al.

14. With respect to claims 2, 14 and 20, Aoshima et al. disclose the provision of an evacuating and exhausting means (17) of the installation chamber.

15. With respect to claims 3, 15 and 21, in Arai, the film formation chamber is connected to an evacuation/exhaust treatment chamber (108) and has means for introducing at least one of a material gas and a cleaning gas (107).

16. With respect to claims 5, 17 and 23, Arai discloses the film formation chamber having a shutter (105) that sections the film formation chamber and shields evaporation of the substrate.

17. With respect to claims 6, 18 and 24, the apparatus of Arai also further comprises a sealing chamber (511) connected to the conveyance chamber, wherein the sealing chamber is connected to evacuating/exhausting means and has a mechanism for applying a seal material (paragraphs 55-58). Examiner notes that the courts have ruled that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

18. With respect to claims 33 and 35-36, according to the teachings of Arai and Aoshima, as described above, each of the movement means for each of the evaporation sources would be located in a single installation chamber.

19. Claims 7-9, 11-12 and 34are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0009538 A1 to Arai in view of Japanese Patent Publication No. 2000223269A to Aoshima et al., and U.S. Patent No. 6,090,207 to Knauss et al. and U.S. Patent Publication No. 2002/0030443 to Konuma et al.

20. Regarding claim 7: Arai discloses an apparatus for forming a film substantially as claimed in Figures 1-3, comprising: a conveyance chamber (501) connected to a load chamber (504); a film formation chamber (506) connected to the conveyance

chamber; and an installation chamber (508) connected to the film formation chamber comprising means adapted to move first, second and third evaporation sources (evaporation sources 109 a-c; interior transferring mechanism, see paragraph 52). Arai also teach that one or both of a substrate and an evaporation cell are moved during evaporation in order to deposit material over a wide region (paragraph 27). Also, with respect to the shape of the openings in the sources, as recited in claims 13 and 19, the courts have held that selections of shape are a matter of choice which a person of ordinary skill in the art will find obvious absent persuasive evidence that the particular configuration of the claimed shape was significant. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

21. However, few details are given on regarding the means adapted to move the first second and third interior transferring mechanism.

22. Aoshima et al. disclose an installation chamber (13) comprising means adapted to move (15) first, second and third evaporation sources, wherein the means to move the first, second and third evaporation sources is configured to move in an x direction, y direction and z direction in a film formation chamber (see arrows in Figures 1 and 2 and paragraph 20 of online JPO translation) for the purpose of providing an organic thin film forming device that is suitable for mass production and can continuously produce highly-reproducible organic films (abstract).

23. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided the installation chamber pf Arai comprising means adapted to move the first, second and third evaporation sources,

wherein the means to move the first, second and third evaporation sources is configured to move in an x direction, y direction and z direction in a film formation chamber during evaporation in order to provide an organic thin film forming device that is suitable for mass production and can continuously produce highly-reproducible organic films as taught by Aoshima et al.

24. Regarding the provision of individual means adapted to move the evaporation sources and individual installation chambers for the means adapted to move the evaporation chambers, Examiner notes that the courts have ruled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). In the instant case, duplicating the means adapted to move the evaporation sources and the installation chamber such that individual means adapted to move were provided for each of the evaporation sources in a single chamber or in individual chambers would produce neither a new, nor an unexpected result, rather such provisions would allow for increased optimization of the overall apparatus resulting from the capability to individually handle each of the evaporation sources.

25. It is also noted that the mechanism for setting an evaporation material in each of the first, second and third evaporation sources in the installation chamber can be interpreted a conveyance program of a control program as provided in Aoshima et al. (see paragraph 20 of translation).

26. Regarding the recitation, "wherein an evaporation is performed while at least one of the means adapted to move the first, second and third evaporation sources moves in the film formation chamber, it is noted that this can be seen as an intended use of the apparatus that could be practiced by the prior art. For example, if any of the evaporation sources is heated high enough (intentionally or unintentionally) while being moved from the installation chamber to the film formation chamber in Aoshima et al., an evaporation could be performed.

27. Nevertheless, movement of deposition sources is known, as demonstrated by Knauss et al.

28. Knauss et al. discloses movement of a substrate and/or deposition sources during a deposition for the purpose of forming a film as desired (see, e.g., column 7, rows 41-63).

29. It would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to provide movement of a substrate and/or deposition sources in Arai et al. and Aoshima et al. during a deposition in order to form a film as desired as taught by Knauss et al.

30. Arai, Aoshima et al. and Knauss et al. disclose the apparatus substantially as claimed and as described above.

31. However, Arai, Aoshima et al. and Knauss et al. fail to disclose the apparatus comprising an aligning means that aligns a mask and a substrate.

32. Konuma et al. disclose an aligning means that aligns a mask and a substrate for the for the purpose of providing the high accuracy positioning as required (paragraphs46 and 47).

33. It would have been obvious to one of ordinary skill in the art at the time the Applicant's invention was made to have provided an aligning means that aligns a mask and a substrate in Arai, Aoshima et al. and Knauss et al. in order to provide the high accuracy positioning as required as taught by Konuma et al.

34. With respect to claims 8, Aoshima et al. disclose the provision of an evacuating and exhausting means (17) of the installation chamber.

35. With respect to claim 9, in Arai, the film formation chamber is connected to an evacuation/exhaust treatment chamber (108) and has means for introducing at least one of a material gas and a cleaning gas (107).

36. With respect to claim 11, Arai discloses the film formation chamber having a shutter (105) that sections the film formation chamber and shields evaporation of the substrate.

37. With respect to claim 12, the apparatus of Arai also further comprises a sealing chamber (511) connected to the conveyance chamber, wherein the sealing chamber is connected to evacuating/exhausting means and has a mechanism for applying a seal material (paragraphs 55-58). Examiner notes that the courts have ruled that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

38. With respect to claim 34, according to the teachings of Arai and Aoshima and Konuma, as described above, each of the movement means for each of the evaporation sources would be located in a single installation chamber.

Response to Remarks

39. Applicant's arguments with respect to claims 1-3, 5-9, 11-15, 17-21, 23-24 and 33-36 have been considered but are moot in view of the new ground(s) of rejection. Knauss et al. in combination with the previously relied upon prior art teach the claim limitations as amended.

40. Applicant's arguments filed with respect to the reliance upon *In re Harza* have been fully considered but they are not persuasive. As noted above, in the instant case, duplicating the means adapted to move the evaporation sources and the installation chamber such that individual means adapted to move were provided for each of the evaporation sources in a single chamber or in individual chambers would produce neither a new, nor an unexpected result, rather *such provisions would allow for increased optimization of the overall apparatus resulting from the capability to individually handle each of the evaporation sources, as would be obvious to one of ordinary skill in the art exercising ordinary creativity, common sense and logic*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARLA MOORE whose telephone number is (571)272-1440. The examiner can normally be reached on Monday-Friday, 9:00 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571.272.1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karla Moore/
Primary Examiner, Art Unit 1792